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(54) Title: **PLANTS WITH REDUCED ACTIVITY OF A CLASS 3 BRANCHING ENZYME**

(57) Abstract: The present invention relates to plants cells and plants, which are genetically modified, wherein the genetic modification leads to the reduction of the activity of a Class 3 vegetable branching enzyme in comparison with corresponding wild type plant cells or wild type plants that have not been genetically modified. Furthermore, the present invention relates to means and methods for the manufacture of such plant cells and plants. Plant cells and plants of this type synthesise a modified starch. The present invention therefore also relates to the starch synthesised by the plant cells and plants according to the invention as well as to methods for the manufacture of the starch and to the manufacture of starch derivatives of this starch. Furthermore, the present invention relates to nucleic acids coding a Class 3 branching enzyme, vectors, host cells, plant cells and plants containing such nucleic acid molecules.

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